CLAIMS

1. A wireless integrated circuit (IC) communication device which communicates with a reader/writer, using a time slot method or a slot marker method, the device comprising:

a slot number obtainment unit operable to obtain a number of time slots which is included in a request command transmitted from the reader/writer;

a response slot information storage unit operable to store a response slot information indicating a condition for sending a response to the reader/writer in the same time slot as a time slot in which at least one of other wireless IC communication devices sends a response;

a response slot determination unit operable to determine a time slot in which the response should be sent to the reader/writer, based on the number of time slots and the response slot information; and

a response unit operable to send the response to the reader/writer in the determined time slot.

2. A wireless IC communication device according to Claim 1,

wherein the response slot information indicates that responses should be sent in all of the time slots, and

the response slot determination unit is operable to determine that responses should be sent in all of the time slots specified by the number of time slots.

3. A wireless IC communication device according to Claim 1,

wherein the response slot information indicates that responses should be sent in part of the time slots, and

the response slot determination unit is operable to determine that responses should be sent into part of the time slots specified by the number of time slots.

4. A wireless IC communication device according to Claim 1,

wherein the response slot information is a random number sequence generated by a predetermined wireless IC communication device, and

the response slot determination unit is operable to determine that a response should be sent in a time slot specified by the random number sequence.

5. A wireless IC communication device according to Claim 3,

wherein the response slot determination unit is operable to determine that responses should be sent in more than two time slots.

6. A wireless IC communication device according to Claim 3,

wherein the response slot determination unit is operable to determine that responses should be sent in more than two time slots whose numbers are in sequence.

7. A wireless IC communication device according to Claim 1, further comprising

a response slot information obtainment unit operable to obtain the response slot information,

wherein the response slot information storage unit is operable to store the response slot information obtained by the response slot information obtainment unit.

8. A wireless IC communication device according to Claim 1, further comprising

a timer operable to validate a function of the response slot determination unit only during a predetermined period of time.

9. A response method used by a wireless integrated circuit (IC)

communication device that communicates with a reader/writer, using a time slot method or a slot marker method, the response method comprising:

obtaining a number of time slots which is included in a request command transmitted from the reader/writer;

storing a response slot information indicating a condition for sending a response to the reader/writer in the same time slot as a time slot in which at least one of other wireless IC communication devices sends a response;

determining a time slot in which the response should be sent to the reader/writer, based on the number of time slots and the response slot information; and

sending the response to the reader/writer in the determined time slot.

10. A program for a communication between a wireless integrated circuit (IC) communication device and a reader/writer based on a time slot method or a slot marker method, the program causing a computer to execute:

obtaining a number of time slots which is included in a request command transmitted from the reader/writer;

storing a response slot information indicating a condition for sending a response to the reader/writer in the same time slot as a time slot in which at least one of other wireless IC communication devices sends a response;

determining a time slot in which the response should be sent to the reader/writer, based on the number of time slots and the response slot information; and

sending the response to the reader/writer in the determined time slot.

11. A computer-readable storage medium storing a program for a

communication between a wireless integrated circuit (IC) communication device and a reader/writer based on a time slot method or a slot marker method,

wherein the program causes a computer to execute:

obtaining a number of time slots which is included in a request command transmitted from the reader/writer;

storing a response slot information indicating a condition for sending a response to the reader/writer in the same time slot as a time slot in which at least one of other wireless integrated circuit (IC) communication devices sends a response;

determining a time slot in which the response should be sent to the reader/writer, based on the number of time slots and the response slot information; and

sending the response to the reader/writer in the determined time slot.

12. An integrated circuit used by a wireless integrated circuit (IC) communication device that communicates with a reader/writer, using a time slot method or a slot marker method, the integrated circuit comprising:

a slot number obtainment unit operable to obtain a number of time slots which is included in a request command transmitted from the reader/writer;

a response slot determination unit operable to determine a time slot in which a response should be sent to the reader/writer, based on the number of time slots and a response slot information indicating a condition for sending the response to the reader/writer in the same time slot as a time slot in which at least one of other wireless IC communication devices sends a response; and

a response unit operable to send the response to the reader/writer in the determined time slot.